

I CLAIM:

Claim 17. (New):

In a bandsaw machine with an endless flexible saw-toothed bandsaw blade rotatably motor-driven around a plurality of blade transporting wheels through a workpiece,

the improvement wherein:

    said bandsaw blade has uniform and consistently spaced saw teeth along both edges

    said bandsaw has one or more blade guides to prevent the deflection of said blade while being forced through said workpiece

    said blade guides have two rotatably mounted thrust support rollers radially opposed to each other on opposite edges of said blade and parallel to the plane of the kerf through the workpiece

    said thrust support rollers have circumferentially arrayed indentations corresponding in size and shape to the blade's teeth

    said thrust support rollers have circumferentially arrayed cogs corresponding to the size and shape of the blade's gullets

    said blade guides have an adjustable means to support the flat edge of the blade against side-to-side deflection and to hold said blade in line with said indentations in said radially opposed thrust support rollers

    said thrust support rollers and the means to support the blade against side-to-side deflection are adjustably mounted to said bandsaw by means of an adjustably mounted blade guide assembly bracket.

Claim 18. (New):

The combination of a double-edged blade and the blade guides of Claim 1 wherein:

    the teeth of the blade do not substantially contact the thrust support roller

    the gullets of the moving blade substantially engage the cogs formed by circumferential array of indentations to rotate the idle thrust support roller

    said blade guides with opposing thrust support rollers can be used singly or in pairs on a bandsaw to effect a two-way cutting function.